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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,420

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Uwe Neumann

VOGEL.AIRB.PT1

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12/23/2009

INTELLECTUAL PROPERTY LAW GROUP LLP
12 SOUTH FIRST STREET
SUITE 1205
SAN JOSE, CA 95113

EXAMINER

O'HARA, BRIAN M

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,420	Applicant(s) NEUMANN ET AL.	
	Examiner Brian M. O'Hara	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-64 is/are pending in the application.
- 4a) Of the above claim(s) 38-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The notation used below, e.g. 54/52, indicates: Claim 54 which is dependant upon claim 52. Similarly, 54/53 indicates: Claim 54 which is dependant upon claim 53.

3. **Claims 52, 54/52, 57/52, 58/52, and 59-63 are rejected under 35 U.S.C. 102(b) as being anticipated by Lindstrom et al. (US Patent 6,299,108 B1).** Lindstrom et al. discloses an apparatus for load limiting in an aircraft high-lift system comprising: a branching drive system (See Fig. 8) for mechanical power transmission to drive stations (See Figs. 4, 6, and 7) for individual segments of landing-flap systems (4a and 4b) via respective drive trains (36) position sensors (30), and a drive unit (7), having a monitoring unit (34) designed to process signals (Column 3, Lines 41-44) from the position sensors and, by comparison of at least one reference value ("sensor output signal" Column 3, Line 41) and a corresponding threshold value ("predetermined level" Column 3, Line 42), to produce a control signal (Column 3, Lines 43-45) for monitored limiting (35) of the power supply to the drive unit by limiting the drive power (Column 3, Lines 43-44).

4. With regard to claim 54/52, Lindstrom et al. discloses angle position transmitter (30) on the branching transmissions (27) of the drive trains.

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5. With regard to claim 57/52 and 58/52, Lindstrom et al. discloses a monitoring unit (34) capable of signal comparison between two respective subsystems (See Column 3, Lines 59-65).

6. With regard to claims 59, 60, 61, and 62, Lindstrom et al discloses using signals provided by the sensors (30) mounted on branching transmissions (27) of the drive trains to calculate a reference value (See Column 3, Lines 43-48).

7. With regard to claim 63, Lindstrom et al. discloses that the drive unit can be controlled in a highly dynamic manner (via 35).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 53, 54/53, 55, 56, 57/53, 58/53 and 64 are rejected under 35**

U.S.C. 103(a) as being unpatentable over Lindstrom et al. as applied to claim 52

above, and further in view of Baston et al. (US Patent 4,260,121). Lindstrom et al. discloses the load limiting apparatus as described above, but does not disclose having an angle position transmitter on the drive unit. Baston et al. discloses angle position transmitters (36 and 37) on a drive unit (23). At the time of invention, it would have been obvious to one of ordinary skill in the art to provide angle position sensors on the drive unit of Lindstrom et al. The motivation for doing so would have been to make sure the drive unit was operating correctly.

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10. With regard to claim 54/53, Lindstrom et al. discloses angle position transmitter (30) on the branching transmissions (27) of the drive trains. The above rejection of claim 53 is relied upon.

11. With regard to claim 55/52 Baston et al discloses angle position transmitters (36 and 37) on a drive unit (23), and a monitoring unit (27) which receives signals from the angle position transmitters, i.e. sensors, on the drive unit. At the time of invention, it would have been obvious to one of ordinary skill in the art to provide the monitoring unit of Lindstrom et al., as described above with respect to claim 52, with the ability to calculate the at least one reference value from the signals received from the sensors on the drive unit of Baston et al. The motivation for doing so would have been to allow the monitoring unit to make sure the drive unit was operating correctly.

12. With regard to claims 55/53, and 56 Baston et al. discloses a monitoring unit (27) which receives signals from the sensors (36 and 37) located on a drive unit (23). At the time of invention, it would have been obvious to one of ordinary skill in the art to provide the monitoring unit of Lindstrom et al. as described above with respect to claim 52 with the ability to calculate the at least one reference value from the signals received from the sensors on the drive unit of Baston et al. as described with respect to claim 53. The motivation for doing so would have been to allow the monitoring unit to make sure the drive unit was operating correctly. The above rejection of claim 53 is relied upon.

13. With regard to claim 57/53 and 58/53, Lindstrom et al. discloses a monitoring unit (34) capable of signal comparison between two respective subsystems (See Column 3, Lines 59-65). The above rejection of claim 53 and 56 is relied upon.

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With regard to claim 64, Lindstrom et al discloses a drive unit and branching transmission as described above, but does not disclose a shaft section between the two that is highly flexible. Baston et al. discloses a shaft section of high flexibility (21). At the time of invention it would have been obvious to one of ordinary skill in the art to provide the shaft section of Baston et al. between the drive unit and branching transmission of Lindstrom et al. The motivation for doing so would have been to locate the drive unit in an easy to access area for maintenance reasons. The above rejection of claim 52 is relied upon.

Response to Arguments

14. Applicant's arguments filed 07/27/2009 have been fully considered but they are not persuasive. Applicant states on Page 10 that "Lindstrom does not teach of at least the limitations of a "reference variable which represents a load in the drive trains"". Lindstrom clearly discloses a reference variable on Column 3, Lines 38-44 of a two output signals which combine to form a "signal difference". This signal difference indicates an undesired load being applied to the flap. Therefore Lindstrom meets the claim of a reference variable ("signal difference" of output signals) which represents a load in the drive trains.

15. Also on Page 10, Applicant states that "Lindstrom fails to show "limiting a drive power that is supplied"". The examiner upholds that closing a shut-off valve is synonymous with "limiting". The power supply of Lindstrom is both monitored by the electronic control box (34); in conjunction with sensors (30) and limited by the shutoff valve (35).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on Monday thru Friday 10am - 5pm except the first Friday of every Bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael R. Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael R Mansen/
Supervisory Patent Examiner, Art Unit 3644

/B. M. O./
Examiner, Art Unit 3644